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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known	
Application Number	10/643,586
Filing Date	August 18, 2003
First Named Inventor	Faanes, Gregory
Group Art Unit	2183
Examiner Name	Fennema, Robert

Sheet 1 of 1

Attorney Docket No: 1376.699US1

US PATENT DOCUMENTS				
Examiner Initial *	**USP Document Number**	**Publication Date**	**Name of Patentee or Applicant of cited Document**	**Filing Date If Appropriate**
RF	US-5,721,921	02/24/1998	Kessler, R. E., et al.	05/25/1995
RF	US-5,765,009	06/09/1998	Ishizaka, K.	01/08/1997
RF	US-6,308,316	10/23/2001	Hashimoto, S. , et al.	01/08/1998

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	**Foreign Document No**	**Publication Date**	**Name of Patentee or Applicant of cited Document**	**T[2]**

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	**Cite No [1]**	**Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.**	**T[2]**
RF		"Msync - Synchronise Memory with Physical Storage", The Single UNIX ® Specification, Version 2: Msync, The Open Group, http://www.opengroup.org/onlinepubs/007908799/xsh/msync.html,(1997),3 pgs.	
RF		COHOON, J. , et al., C++ Program Design, McGraw-Hill Companies, Inc., 2nd Edition,(1999),493	
RF		PATTERSON, DAVID A., et al., Computer Architecture: A Quantitative Approach, 2nd Edition, Morgan Kaufmann Publishers, Inc., San Francisco, CA,(1996),699-708	
RF		PATTERSON, D. A., et al., Computer Architecture: A Quantitative Approach, 2nd Edition, Morgan Kaufmann Publishes, Inc.,(1996),194-197	

EXAMINER /Robert Fennema/ **DATE CONSIDERED** 09/29/2006

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Sheet 1 of 5

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US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
RF	US-2002/0169938A1	11/14/2002	Scott, S. L., et al.	12/14/2001
	US-2002/0172199A1	11/21/2002	Scott, S. L., et al.	12/14/2001
	US-2003/0005380A1	01/02/2003	Nguyen, H. T., et al.	06/29/2001
	US-4,771,391	09/13/1988	Blasbalg, H.	07/21/1986
	US-4,868,818	09/19/1989	Madan, H. S., et al.	10/29/1987
	US-4,888,679	12/19/1989	Fossum, T., et al.	01/11/1988
	US-4,933,933	06/12/1990	Dally, W. J., et al.	12/19/1986
	US-5,008,882	04/16/1991	Peterson, J. C., et al.	08/17/1987
	US-5,031,211	07/09/1991	Nagai, Y., et al.	02/01/1990
	US-5,036,459	07/30/1991	Den Haan, P. A., et al.	03/09/1989
	US-5,068,851	11/26/1991	Bruckert, W., et al.	08/01/1989
	US-5,105,424	04/14/1992	Flaig, C. M., et al.	06/02/1988
	US-5,157,692	10/20/1992	Horie, T., et al.	03/20/1990
	US-5,161,156	11/03/1992	Baum, R. I., et al.	02/02/1990
	US-5,170,482	12/08/1992	Shu, R., et al.	02/13/1991
	US-5,175,733	12/29/1992	Nugent, S. F.	12/27/1990
	US-5,197,130	03/23/1993	Chen, S. S., et al.	12/29/1989
	US-5,218,601	06/08/1993	Chujo, T., et al.	12/20/1990
	US-5,218,676	06/08/1993	Ben-ayed, M., et al.	01/08/1990
	US-5,239,545	08/24/1993	Buchholz, D. R.	11/05/1990
	US-5,276,899	01/04/1994	Neches, P. M.	08/10/1990
	US-5,280,474	01/18/1994	Nickolls, J. R., et al.	01/05/1990
	US-5,313,628	05/17/1994	Mendelsohn, N. R., et al.	12/30/1991
	US-5,313,645	05/17/1994	Rolfe, D. B.	05/13/1991
	US-5,331,631	07/19/1994	Teraslinna, K. T.	03/16/1993
	US-5,333,279	07/26/1994	Dunning, D.	06/01/1992
	US-5,341,504	08/23/1994	Mori, K., et al.	03/01/1990
	US-5,347,450	09/13/1994	Nugent, S. F.	08/19/1993
	US-5,353,283	10/04/1994	Tsuchiya, P. F.	05/28/1993
	US-5,365,228	11/15/1994	Childs, P. L., et al.	08/21/1991
	US-5,418,916	05/23/1995	Hall, B. A., et al.	10/04/1990
	US-5,430,850	07/04/1995	Papadopoulos, G. M., et al.	07/22/1991
	US-5,434,995	07/18/1995	Oberlin, S. M., et al.	12/10/1993
	US-5,440,547	08/08/1995	Easki, H., et al.	01/05/1994
	US-5,446,915	08/29/1995	Pierce, P. R.	05/25/1993
	US-5,517,497	05/14/1996	LeBoudec, J.-Y., et al.	03/21/1995
	US-5,546,549	08/13/1996	Barrett, L., et al.	06/01/1994
	US-5,548,639	08/20/1996	Ogura, T., et al.	10/22/1992
	US-5,550,589	08/27/1996	Shiojiri, H., et al.	11/04/1994
	US-5,555,542	09/10/1996	Ogura, T., et al.	01/11/1996

EXAMINER **DATE CONSIDERED**

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First Named Inventor	Faanes, Gregory
Group Art Unit	2183
Examiner Name	Unknown

Sheet 2 of 5

Attorney Docket No: 1376.699US1

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
RF	US-5,560,029	09/24/1996	Papadopoulos, G. M., et al.	05/31/1994
	US-5,640,524	06/17/1997	Beard, D. R., et al.	02/28/1995
	US-5,649,141	07/15/1997	Yamazaki, T.	06/30/1995
	US-5,860,146	01/12/1999	Vishin, S. , et al.	06/25/1996
	US-5,897,664	04/27/1999	Nesheim, W. A., et al.	07/01/1996
	US-6,003,123	12/14/1999	Carter, N. P., et al.	02/10/1998
	US-6,088,701	07/11/2000	Whaley, K. M., et al.	11/14/1997
	US-6,101,590	08/08/2000	Hansen, C.	10/10/1995
	US-6,105,113	08/15/2000	Schimmel, C. F.	08/21/1997
	US-6,490,671	12/03/2002	Frank, R. L., et al.	05/28/1999
	US-6,684,305	01/27/2004	Deneau, T. M.	04/24/2001
	US-6,782,468	08/24/2004	Nakazato, S.	12/13/1999
	US-6,816,960	11/09/2004	Koyanagi, H.	07/10/2001
	US-6,922,766	07/26/2005	Scott, S. L.	09/04/2002
	US-6,925,547	08/02/2005	Scott, S. L., et al.	12/14/2001
	US-6,976,155	12/13/2005	Drysdale, T. G., et al.	06/12/2001

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T[2]
RF	EP-0353819A2	02/07/1990	Gupta, R., et al.	
	EP-0473452A2	03/04/1992	Duerrschmid, O., et al.	
	EP-0475282A2	09/14/1990	Kametani, M.	
	EP-0501524A2	09/02/1992	Hillis, D. W., et al.	
	EP-0570729A2	11/24/1993	Collins, C. A., et al.	
	WO-87/01750A1	03/26/1987	Anderson, S.	
	WO-88/08652A1	11/03/1988	Hillis, D. W., et al.	
	WO-95/16236A1	06/15/1995	Oberlin, S. M., et al.	
	WO-96/10283A1	04/04/1996	Bonner, J.	
	WO-96/32681A1	10/17/1996	Thorson, G. M., et al.	

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No [1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
RF		"Cray Assembly Language (CAL) for Cray X1™ Systems Reference Manual", Section 2.6, Memory Ordering, http://docs.cray.com/books/S-2314-51/index.html,(June, 2003), 302 pgs.	
RF		"Deadlock-Free Routing Schemes on Multistage Interconnection Networks", IBM Technical Disclosure Bulletin, 35, (December, 1992), 232-233	

EXAMINER **DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

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Group Art Unit	2183
Examiner Name	Unknown

Sheet 3 of 5

Attorney Docket No: 1376.699US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

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RF		"ECPE 4504: Computer Organization Lecture 12: Computer Arithmetic", The Bradley Department of Electrical Engineering,(October 17, 2000),12 pgs.	
		ADVE, V. S., et al., "Performance Analysis of Mesh Interconnection Networks with Deterministic Routing", IEEE Transactions on Parallel and Distributed Systems, (March, 1994), 225-246	
		BOLDING, KEVIN, "Non-Uniformities Introduced by Virtual Channel Deadlock Prevention", Technical Report 92-07-07, Department of Computer Science and Engineering, FR-35 University of Washington; Seattle, WA 98195, (July 21, 1992), 6 pgs.	
		BOLLA, R., "A Neural Strategy for Optimal Multiplexing of Circuit and Packet-Switched Traffic", Proceedings, IEEE Global Telecommunications Conference, (1992), 1324-1330	
		BOURA, Y. M., et al., "Efficient Fully Adaptive Wormhole Routing in *n*-Dimensional Meshes", Proceedings, International Conference on Distributed Computing Systems, (June, 1994), 589-596	
		BUNDY, A. , et al., "Turning Eureka Stepsinto Calculations in Automatic Program", Proceedings of UK IT 90, (IEE Conf. Pub. 316) (DAI Research Paper 448), (1991), 221-226	
		CARLILE, BRADLEY R., "Algorithms and Design: The CRAY APP Shared-Memory System", COMPCON Spring '93. Digest of Papers., (February 22, 1993), 312-320	
		CHEN, Y., et al., "UTLB: A Mechanism for Address Translation on Network Interfaces", Proceedings of the Eighth International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), (1998),193-204	
		CHIEN, A. A., et al., "Planar-Adaptive Routing: Low-Cost Adaptive Networks for Multiprocessors", Proceedings, 19th International. Symposium on Computer Architecture, (May, 1992), 268-277	
		DALLY, W. J., et al., "Deadlock-Free Adaptive Routing in Multicomputer Networks Using Virtual Channels", IEEE Transactions on Parallel and Distributed Systems, 4(4), (April, 1993), 466-475	
		DALLY, WILLIAM , et al., "Deadlock-Free Message Routing in Multiprocessor Interconnection Networks", IEEE Transactions on Computers, Vol. C-36, (May 1987), 547-553	
		DALLY, WILLIAM , "Performance Analysis of *k*-ary *n*-cube Interconnection Networks", IEEE Transactions on Computers, 39(6), (June, 1990), 775-785	
		DALLY, W. J., "Virtual Channel Flow Control", Proceedings, 17th International Symposium on Computer Architecture, (May, 1990), 60-80	
		DUATO, J. , "A New Theory of Deadlock-Free Adaptive Routing in Wormhole Networks", IEEE. Transactions on Parallel and Distributed Systems, 4(12), (December, 1993), 1320-1331	

EXAMINER **DATE CONSIDERED**

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First Named Inventor	Faanes, Gregory
Group Art Unit	2183
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Sheet 4 of 5

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OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

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RF		ERNST, D., et al., "Cyclone: A Broadcast-Free Dynamic Instruction Scheduler with Selective Replay", 30th Annual International Symposium on Computer Architecture (ISCA-2003), (June, 2003), 10 pgs.	
		GALLAGER, ROBERT, "Scale Factors for Distributed Routing Algorithm", NTC '77 Conference Record, Vol. 2, (1977), 28:2-1 – 28:2-5	
		GLASS, C. J., et al., "The Turn Model for Adaptive Routing", Proceedings, 19th International Symposium on Computer Architecture, (May, 1992), 278-287	
		GRAVANO, L., et al., "Adaptive Deadlock- and Livelock-Free Routing With all Minimal Paths in Torus Networks", IEEE Transactions on Parallel and Distributed Systems, 5(12), (December, 1994), 1233-1251	
		GUPTA, RAJIV, et al., "High Speed Synchronization of Processors Using Fuzzy Barriers", International Journal of Parallel Programming 19(1), (February, 1990), 53-73	
		ISHIHATA, HIROAKI, et al., "Architecture of Highly Parallel AP1000 Computer", Systems and Computers in Japan, 24(7), (1993), 69-76	
		JESSHOPE, C. R., et al., "High Performance Communications in Processor Networks", Proceedings, 16th International Symposium on Computer Architecture, (May 1989), 150-157	
		KIRKPATRICK, S., et al., "Optimization by Simulated Annealing", Science, 220(4598), (May 13, 1983), 671-680	
		KONTOTHANASSIS, L., et al., "VM-Based Shared Memory on Low-Latency, Remote-Memory-Access Networks", Proceedings of the ACM ISCA '97, (1997),157-169	
		LINDER, DANIEL H., et al., "An Adaptive and Fault Tolerant Wormhole Routing Strategy for *k*-ary *n*-cubes", IEEE Transactions on Computers,40(1), (1991), 2-12	
		LUI, Z , et al., "Grouping Virtual Channels for Deadlock-Free Adaptive Wormhole Routing", Fifth International Conference, Parallel Architectures and Languages Europe, (PARLE '93), (June 14-17, 1993), 254-265	
		NUTH, PETER, et al., "The J-Machine Network", Proceedings of the IEEE International Conference on Computer Design on VLSI in Computer & Processors, (1992), 420-423	
		O'KEEFE, MATTHEW T., et al., "Static Barrier MIMD: Architecture and Performance Analysis", Journal of Parallel and Distributed Computing, 25(2), (March 25, 1995), 126-132	
		SCOTT, S., "Synchronization and Communication in the T3E Multiprocessor", ASPLOS, Volume II, (1996), 26-36	
		SHUMWAY, M., "Deadlock-Free Packet Networks", Transputer Research and Applications 2, NATUG-2 Proceedings of the Second Conference of the North American Transputer Users Group, (October 18-19, 1989), 140-177	

EXAMINER **DATE CONSIDERED**

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RF		SNYDER, L., "Introduction to the Configurable, Highly Parallel Computer", IEEE Computer 15(1), (January, 1982), 47--56	
		TALIA, D., "Message-Routing Systems for Transputer-Based Multicomputers", IEEE Micro, 13(3), (June, 1993),62-72	
		WANG, WEILIN, et al., "Trunk Congestion Control in Heterogeneous Circuit Switched Networks", IEEE Transactions on Communications, 40(7), (July, 1992), 1156-1161	
		WOOD, D. A., et al., "An In-Cache Address Translation Mechanism", Proceedings of the 13th Annual International Symposium on Computer Architecture, (1986), 358-365	
		WU, MIN-YOU, et al., "DO and FORALL: Temporal and Spacial Control Structures", Proceedings, Third Workshop on Compilers for Parallel Computers, ACPC/TR, (July, 1992),258-269	
		YANG, C. S., et al., "Performance Evaluation of Multicast Wormhole Routing in 2D-Torus Multicomputers", Proceedings, Fourth International Conference on Computing and Information (ICCI '92), (1992),173-178	
		YANTCHEV, J. , et al., "Adaptive, Low Latency, Deadlock-Free Packet Routing for Networks of Processors", IEEE Proceedings, 136, Part E, No. 3, (May, 1989), 178-186	

EXAMINER	/Robert Fennema/	DATE CONSIDERED	09/29/2006

Substitute Disclosure Statement Form (PTO-1449)
* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional) [2] Applicant is to place a check mark here if English language Translation is attached